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CHEEMA, UMAR	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/800,828
Filing Date: March 15, 2004
Appellant(s): JOHNSON, TED C.

Ted C. Johnson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/11/2008 appealing from the Office action mailed 04/29/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

20030065950	Yarborough	4-2003
6859835	Hipp	2-2005
20040019689	Fan	1-2004

20020112076 Rueda et al. 8-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1-3, 9, 10, 15, 17-19, 21, 23-25, 27, 28, 33, and 34 are rejected under 35 U.S.C. 103(a) as being are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarborough (Yarborough) U.S. PG. Pub. No. 2003/0065950 in view of Hipp (Hipp) U.S. Patent No. 6859835.

2. Regarding claim 1, Yarborough discloses a method comprising: detecting, at the server computer, a client connection at a first port (see e.g. page 1, ¶0008, lines 1-3); providing, by the server computer, the client with a decoy port number (see e.g. page 1,

¶0010, lines 24-25); and providing, by the server computer, services to the client on a second port having a second port number that is mapped to the decoy port number (see e.g. page 1, ¶0010, lines 14-21). However Yarborough does not explicitly teach: the second port number is different from the decoy port number.

3. In the same field of endeavor, Hipp teaches (see e.g. col. 6, lines 19-40).

4. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Hipp's teachings as explained above with the teachings of Yarborough, for the purpose of (see Hipp, col. 2, lines 50-58). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

5. Regarding claim 2, Yarborough-Hipp disclose the invention substantially as disclosed. Yarborough further discloses the decoy port number is provided to the client by the operation of a routine that is associated with the server (see e.g. page 1, ¶0010, lines 14-21).

6. Regarding claim 3, Yarborough-Hipp disclose the invention substantially as disclosed. Yarborough further discloses launching the server on the second port; and monitoring the second port for a connection by the client (see e.g. page 1, ¶0010, lines 14-21).

7. Claim 9 lists all the same elements of claim 1, but in a computer system form rather than method form. Therefore, the supporting rationale of the rejection to claim 1 applies equally as well to claim 9.

8. Regarding Claim 10, the limitations of claim 10 have already been addressed above in the method form as opposed to the system form of claim 3.

9. Claim 15 is substantially the same as claim 1 with the variation of having replicated the server application in the system and is thus rejected for reasons similar to those in rejecting claim 1. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to increase (i.e. double or triple) the number of server applications to increase the performance of the system.

10. Regarding Claim 17, Yarborough discloses the invention substantially as claimed. However, Yarborough does not explicitly teach: translating.

11. In the same field of endeavor, Hipp teaches (see e.g. col. 7, lines 2-7) translation.

12. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Hipp's teachings as explained above with the teachings of Yarborough, for the purpose of (see Hipp, col. 2, lines 50-58). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

13. Regarding Claim 18, the limitations of claim 18 have already been addressed above.

14. Regarding Claim 19, the limitations of claim 19 have already been addressed above.

15. Claim 21 lists all the same elements of claim 1, but in a computer system form rather than method form. Therefore, the supporting rationale of the rejection to claim 1 applies equally as well to claim 21.

16. Claim 23 lists all the same elements of claim 1, but in a machine-readable storage medium that comprises instructions form rather than method form. Therefore, the supporting rationale of the rejection to claim 1 applies equally as well to claim 23.

17. Regarding Claim 24, the limitations of claim 24 have already been addressed above in the method form as opposed to a machine-readable storage medium that comprises instructions form.

18. Regarding Claim 25, the limitations of claim 25 have already been addressed above in the method form as opposed to a machine-readable storage medium that comprises instructions form.

19. Claim 27 lists all the same elements of claim 1, but in a client/server system form rather than method form. Therefore, the supporting rationale of the rejection to claim 1 applies equally as well to claim 27.

20. Regarding Claim 28, the limitations of claim 28 have already been addressed above in a machine-readable storage medium that comprises instructions form as opposed to a client/server system form.

21. Regarding claim 33, Yarborough-Hipp disclose the invention substantially as claimed. However, Yarborough does not explicitly teach: the decoy port number has no meaning to an unauthorized client computer, but the decoy port number is mappable to the second port number by an authorized client computer.

22. In the same field of endeavor, Hipp teaches (see e.g. col. 6, lines 19-40) since only the authorized client computer has the corresponding port translation table, the port number would not have any meaning to an unauthorized client.

23. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Hipp's teachings as explained above with the teachings of Yarborough, for the purpose of (see Hipp, col. 2, lines 50-58). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

24. Regarding claim 34, Yarborough-Hipp disclose the invention substantially as claimed. However, Yarborough does not explicitly teach: the decoy port number is meaningless to an unauthorized client computer, but the decoy port number is mappable to the valid port number by an authorized client computer.

25. In the same field of endeavor, Hipp teaches (see e.g. col. 6, lines 19-40) since only the authorized client computer has the corresponding port translation table, the port number would not have any meaning to an unauthorized client.

26. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Hipp's teachings as explained above with the teachings of Yarborough, for the purpose of (see Hipp, col. 2, lines 50-58). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

Claim Rejections - 35 USC § 103

27. Claims 4-7, 11-13, 16, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarborough in view of Hipp, further in view of Fan (Fan), US PG. Pub. No. 2004/0019689.

28. Regarding Claim 4, Yarborough-Hipp disclose the invention substantially as claimed. However, Yarborough does not explicitly teach: if there is no connection by the client within a predetermined time interval, terminating execution of the server on the second port.

29. In the same field of endeavor, Fan teaches (see e.g. page 2, ¶0019, lines 34-42).

30. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Fan's teachings as explained above with the teachings of Yarborough-Hipp, for the purpose of (see Fan, page 2, ¶ 0017, lines 6-7). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

31. Regarding Claim 5, Yarborough-Hipp disclose the invention substantially as claimed. However, Yarborough does not explicitly teach: maintaining a table of available decoy port numbers that are mapped to valid port numbers.

32. In the same field of endeavor, Fan teaches (see e.g. page 2, ¶0018, lines 15-17).

33. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Fan's teachings as explained

above with the teachings of Yarborough-Hipp, for the purpose of (see Fan, page 2, ¶ 0017, lines 6-7). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

34. Regarding Claim 6, Yarborough-Hipp-Fan disclose the invention substantially as claimed. However, Yarborough does not explicitly teach: the table maintained in the server computer corresponds to a second table maintained at a client computer on which the client is executed, the second table mapping decoy numbers to valid port numbers at the client computer.

35. In the same field of endeavor, Hipp teaches (see e.g. Fig. 6, port translation tables 12 & 13 and col. 7, lines 2-7).

36. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Hipp's teachings as explained above with the teachings of Yarborough, for the purpose of (see Hipp, col. 2, lines 50-58). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

37. Regarding claim 7, Yarborough-Hipp-Fan disclose the invention substantially as claimed. However, Yarborough does not explicitly teach: if there is no connection by the client within a predetermined time interval, terminating execution of the server on the second port.

38. In the same field of endeavor, Fan teaches (see e.g. page 2, ¶0018, lines 15-17).

39. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Fan's teachings as explained above with the teachings of Yarborough-Hipp, for the purpose of (see Fan, page 2, ¶ 0017, lines 6-7). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

40. Regarding Claim 11, the limitations of claim 11 have already been addressed above in the method form as opposed to the system form of claim 4.

41. Regarding Claim 12, the limitations of claim 12 have already been addressed above in the method form as opposed to the system form of claim 5.

42. Regarding Claim 13, the limitations of claim 13 have already been addressed above in the method form as opposed to the system form of claim 6.

43. Claim 16 is substantially the same as claim 7 with the variation of having replicated the server application in the system and thus replicating routines. Claim 16 is thus rejected for reasons similar to those in rejecting claim 7. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to increase (i.e. double or triple) the number of server applications thereby increasing (i.e. doubling or tripping) the routines to increase the performance of the system.

44. Regarding claim 31, Yarborough-Hipp-Fan disclose the invention substantially as claimed. However, Yarborough does not explicitly teach: providing the decoy port

number that has no meaning to an unauthorized client computer, but the decoy port number is mappable to the second port number by an authorized client computer.

45. In the same field of endeavor, Hipp teaches (see e.g. col. 6, lines 19-40) since only the authorized client computer has the corresponding port translation table, the port number would not have any meaning to an unauthorized client.

46. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Hipp's teachings as explained above with the teachings of Yarborough, for the purpose of (see Hipp, col. 2, lines 50-58). Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

47. Regarding Claim 32, Yarborough-Hipp-Fan disclose the invention substantially as claimed. However, Yarborough does not explicitly teach: the decoy port number provided to the client enables the client to map, using a second table associated with the client, the decoy port number to the second port number such that the client can connect to the computer system at the second port number.

48. In the same field of endeavor, Hipp teaches (see e.g. Fig. 6, port translation tables 12 & 13 and col. 6, lines 19-40 and col. 7, lines 2-7).

49. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Hipp's teachings as explained above with the teachings of Yarborough, for the purpose of (see Hipp, col. 2, lines 50-58). Yarborough provides motivation to do so, by enabling a FTP client and a FTP

server in secured hardware arrangement using extremely few administrative resources (see Yarborough, page 3, ¶0029, lines 1-4).

Claim Rejections - 35 USC § 103

50. Claims 20, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarborough in view Hipp and further in view of Rueda et al. (Rueda) US. PG Pub. No. 2002/0112076.

51. Regarding Claim 20, Yarborough-Hipp discloses the invention substantially as claimed. However, Yarborough-Fan do not explicitly teach: mapping the decoy port number to an intermediate port number; and effecting an offset to the intermediate port number.

52. In the same field of endeavor, Rueda teaches (see e.g. page 22, ¶0306, lines 1-5 & Fig. 30) FTP.

53. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Yarborough-Hipp's teachings as explained above with the teachings of Rueda, for the purpose of (see Yarborough, page 3, ¶0029, lines 1-4). Rueda provides motivation to do so, by allowing a network (client-side network) to have access to another network (the server-side or internet side) using IP-based protocols (see Rueda, page 4, ¶ 0041, lines 1-4).

54. Regarding Claim 30, Yarborough-Hipp discloses the invention substantially as claimed. However, Yarborough-Hipp do not explicitly teach: mapping the decoy port number to an intermediate port number; and effecting an offset to the intermediate port number.

55. In the same field of endeavor, Rueda teaches (see e.g. page 22, ¶0306, lines 1-5 & Fig. 30) FTP.

(10) Response to Argument

56. Appellant's argument with respect to Specification objection has been fully considered and is persuasive. The objection to disclosure in the Specification has been withdrawn.

57. Appellant's arguments with respect to claims 9-13, 21, 32, and 33 rejected under 35 U.S.C § 101 have been fully considered and are persuasive. The 35 U.S.C § 101 have been withdrawn.

Appellant argues claims 1-3, 9, 10, 15, 17-19, 21, 23-25, 27, 28, 33, and 34:

58. On pages 8-11 of Appellant's Appeal Brief, Appellant arguments with respect to claims 1-3 are that Yarborough in view of Hipp does not teach or suggest "providing . . . the client with a decoy port number", and "the second port number is different from the decoy port number." These arguments are not deemed persuasive. In response to the Appellant's arguments, the examiner would like to clarify that the Yarborough in view of Hipp disclose "providing . . . the client with a decoy port number", and "the second port number is different from the decoy port number" (see Yarborough: paragraphs [0010, 0011, 0017]; wherein at least two types of FTP client software program systems are available: passive and active. In a passive FTP client program, the FTP server identifies and opens a new socket for transferring data on the data channel. The new socket information is transmitted to the passive FTP client program and the passive FTP client program uses the newly opened socket on the FTP server to initiate a

session from the FTP client to the FTP server for data transfers. In contrast, an active FTP client program identifies a new socket for communicating data requests, and the FTP server opens a corresponding logical communication port and a new session is initiated from the FTP server to the FTP client. The present invention preferably uses passive mode. Continuing now with the above example, after a specific data request has been received (e.g., a request for a directory listing), the FTP server identified by ftp.lucasarts.com informs a passive FTP client program over the command channel that data will be provided on a newly opened logical communication port which is dynamically assigned by the FTP server and unknown to the FTP client (e.g., port 1025) on the FTP server). Likewise Hipp teaches or suggests "the second port number is different from the decoy port number" (see Hipp: e.g. col. 4, lines 15-43, col. 6, lines 19-40, figure 2, 6 and the details related to figure; wherein the VPM system 148 redirects the communication of the computers 152a-d and applications 154a-g to different virtual ports and thus avoids interferences). Therefore, presently claimed invention is not patentable over Yarborough in view of Hipp.

59. On pages 11 of Appellant's Appeal Brief, Appellant arguments with respect to claims 9, 10, 15, and 33 are that Yarborough in view of Hipp does not teach or suggest, "providing the client with a decoy port number", and "providing services to the client on a second port having a second port number that is mapped to the decoy port number, wherein the second port number is different from the decoy port number". These arguments are substantially the same as those directed toward claims 1-3, which the examiner has responded above. Appellant does not provide any other arguments that

distinguish over the Yarborough in view of Hipp, therefore the present rejection should be affirmed.

60. On pages 11-12 of Appellant's Appeal Brief, Appellant arguments with respect to claims 17-19, 21, 23-25, 27-28, and 34 are that Yarborough in view of Hipp does not teach or suggest, "receiving, from the server computer, a decoy port number that is an invalid port number," and "translating the decoy port number to a valid port number." These arguments are not deemed persuasive. In response to the Appellant's arguments, the examiner would like to clarify that the Yarborough in view of Hipp disclose, "receiving, from the server computer, a decoy port number that is an invalid port number," and "translating the decoy port number to a valid port number (see Yarborough: paragraphs [0010, 0011]; wherein the FTP client then initiates the session with the FTP server over the received IP address and port number and receives the data. Once complete, the socket used for the data channel after the data is successfully received by the passive FTP client program is closed. Any additional data requests by the passive FTP client program (e.g., a request for a file) are again transmitted to ftp.lucasarts.com over the command channel. The passive FTP client program thereafter receives another reply from ftp.lucasarts.com over the command channel that includes yet another new socket (e.g., the IP address of ftp.lucasarts.com and logical communication port 1030). This new socket is used for transferring the requested file over the data channel. The passive FTP client program retransmits its request to the FTP server for the file over the data channel using the newly identified socket, and the FTP server transmits the requested file over the data channel. At the

end of the transmission, the new socket for the data channel is closed. This process continues while the passive FTP client program issues commands to the FTP server)." Likewise, Hipp discloses wherein "translating the decoy port number to a valid port number" (see col. 7, lines 2-7, figure 6 and the details related; wherein the first and second VPMs 150a-b register or record the port translation (step 290 and 292, respectively) and the second VPM 150b returns a virtual port connection or socket connection to the server application at IP address 192.168.1.1 over virtual port 9000 (step 294)). Therefore, presently claimed invention is not patentable over Yarborough in view of Hipp.

Appellant argues claims 4-7, 11-13, 16, 20, 30, 31 and 32:

61. On pages 13-14 of Appellant's Appeal Brief, Appellant arguments with respect to claims 4-7, 11-13, 16, 20, 30, 31, and 32 are defective obviousness rejection of base claims over Yarborough and Hipp and therefore claims 4-7, 11-13, 16, 20, 30, 31, and 32 over Yarborough, Hipp, Fan, and Rueda is also defective. These arguments are not deemed persuasive. Appellant does not provide any other arguments that distinguish over the Yarborough in view of Hipp, therefore the present rejection should be affirmed.

(11) Related Proceeding(s) Appendix

62. No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Umar Cheema/

Examiner, Art Unit 2444

/William C. Vaughn, Jr./

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